On the nature and origin of the...

an idealized amplitude curve was obtained. In these curves, storms and rapid variations were omitted and the general features of the progression of the amplitudes preserved. This method permitted the comparison of the microseismic activity for various periods of activity and different stations. For test purposes, an "index" was introduced to express the correlation between microseisms and the circulation at the isobar level of 500 millibars. The relation between the locations of the centers of the lows and the amplitudes of the microseisms during the individual periods of activity was also followed. It was found 1) that in Europe microseisms are influenced mainly by cyclonic activity in the Eastern portion of the frontal zone between North America and the Western coast of Europe. The periods last from 3 to 9 seconds, and the amplitudes diminish usually toward the South and the East. No rule for the decrease of the amplitudes due to the distance could be established; 2) there is a general prallelism for the microseismic storms as well as for the periods of activity, which is observed on the continental scale. Certain regions have critical positions as for cyclonic centers: Iceland, and the coast (mainly the Northern coast) of Norway for Central Europe, the zone adjoining the Norwegian coast for Scandinavia and

On the nature and origin of the...

the Russian plain. This observation is in agreement with the results obtained by Gutenberg, Båth and Monakhov. It was not possible to study exactly the tectonic relations indicated by Gutenberg. 3) The parallelism of microseisms of continental dimensions must be attributed to sources of the "first order", which considerable geometrical dimensions of the water masses participating in the origination of the microseisms. The individual differences which become apparent on the regional scale, were attributed to sources of the "second order" with smaller dimensions (secondary barometric lows, winds, passage of cold fronts from sea to land) which occur more in the coastal areas. European microseisms are produced by the barometric effect as well as by coastal effects, mainly the "surf effect". This result is a generalisation of the result obtained by Båth for Scandinavia. 4) Generally, the periods vary with the amplitudes. The shorter periods originating from relatively near sources are absorbed with increasing distance; they cannot be observed in the interior of the continent. Gutenberg's formula (Ref. 14: B. Gutenberg: Observations and theory of microseisms. Compendium of Meteorology, 1951, 1303, Boston) expressing the increase of the periods with the distance was not confirmed. The observed periods are generally shorter than the calculated ones. 5) It seems justified to say that

On the nature and origin of the...

regions where there is a very close statistical relation between cyclonic activity and microseismic activity are regions, where microseisms are caused by cyclonic activity. These regions may vary from one station to the next. For Central Europe, the maps seem to indicate preferred depths of 1,000 to 3,000 m. 6) The analogy of the adjusted curves of amplitudes with the adjusted curve of the "indices" giving the circulation suggests that, on principle, it should be possible to study circulation by way of the microseisms. The applicability of the method must be subjected yet to a more profound investigation. If the result is positive, one will have an objective method of considerable importance for climatological investigations. 7) The Longuet-Higgins theory appears to be the most plausible to explain the origin of microseisms in connection with the activity in the center of the cyclone and near the coast-line. This theory further concedes the production of microseisms directly by the "surf effect". Certain phenomena, such as the passivity of stationary cyclones and the variation of the periods with the amplitudes underline the importance of this theory. On the other hand, it is probable that the real conditions correspond better to the theory of Press and Ewing in cases where the periods remain constant in

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increasing amplitudes. An analysis of a large number of cases shows that it would be very difficult to establish a universal theory. There are 4 figures and 18 references: 2 Soviet-bloc and 16 non-Soviet-bloc. The reference to the most recent English-language publication reads as follows: M. Båth: Comparison of Microseisms in Greenland, Iceland and Scandinavie. Tellus, 5, 1953, 109.

ASSOCIATION: Charles University, Prague

SUBMITTED: October 3, 1960

Card 5/5

ZATOPLYAYEV, N.A.; KOKOURCV, G.D.

Impeller for a mechanical flotation machine. Gor. zhur. no.8:77 Ag '64. (MIRA 17:10)

KLYACHIN, V.V., inzh.; KHOPAYEV, S.I., kand. tekhn. nauk; ZATOPLYAYEV, N.A., inzh.

Design of hydrocyclones for the preparation of kaolins and clays. Stek. i ker. 22 no.1:27-30 Ja '65. (MIRA 18:7)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut obogashcheniya i mekhanicheskoy obrabotki poleznykh iskopayemykh.

ZATOPLYAYEV, V.A.; TUROV, V.D.; ARSEN'YEV, V.V.

Preparation of unclassified coal: Jigging unclassified coal at the "Verkhne-Duvanskaya" Central Preparation Plant. Ugol' 39 no 6:17-19 Je'64 (MIRA 17:7)

1. Verkhne-Duvanskaya tsentral'naya obogatitel'naya fabrika (for Zatoplyayev, Turov). 2. Gipromashugleobogashcheniye (for Arsen'yev).

ZATORSKI, Jerzy, inz.

Polish exposition at the 1961 Exhibition of the International Measurements Conference (IMEKO) in Budapest. Pomiary 8 no.1:15-16 Ja '62.

ZATOV, A.A., agronom; IVANOVA, E.A., agronom-ekonomist

Maintain a high productivity of seeded pastures in the forest-meadow zone. Zhivotnovodstvo 23 no.5:50-52 My '61. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov imeni V.R.Vil'yamsa.

(Pastures and meadows)

Report presented at the 3rd National Conference on Semiconductor Compounds, Kishinev, 16-21 Sept 1963

-2-

2. Electrical properties of highly degenerate crystals of n- and p-type gallium arsenide. O. V. Yemel'yanenko, F. P. Kesamanly, D. N. Nasledov, V. G. Sidorov, G. N. Talalakin.

Concerning the interaction of electrons with lattice vibrations in gallium arsenide. O. V. Yemel'yanenko, T. S. Lagunova, D. N. Nasledov, V. Ye. Shcherbatov.

Electrical properties of gallium arsenide with different impurities. D. N. Nasledov, G. N. Talalakin.

Investigation of the properties of impurity zones in crystals of p-type gallium arsenide. O. V. Yemel'yanenko, T. S. Lagunova, D. N. Nasledov, V. Ye. Shcherbatov.

Galvanomagnetic properties of indium arsenide in a wide temperature range. Yu. M. Burdukov, I. V. Zatova, T. S. Lagunova, D. N. Nasledov.

Nernst effect in n-type indium [illegible]
F. P. Kesamanly, E. E. Klotin'.
(Presented by O. V. Yemel'yanenko--[illegible]).

ZATOVIC, M.

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ENERGETIKA, Praha, Czechoslovakia, Vol. 5, no. 3, March 1955

Monthly List of East European Accessions Index (EEAI), Library of Congress, Vol. 8, No. 8, August 1959

Unclassified

ZATOVIC, Tibor; KOZINKA, Anton

Cutoff knuckle breaker. Elektrotechnik 18 no.10:297-298 O '63.

1. Tovarny na obrabeci stroje, n.p., Trencin.

ZATOVSKIY, N. V.

32494. Sushka gidrogenaratora poteryami v rotore. Elektr. stanstii, 1949, No. 10, s. 51-52.

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ZATOVSKIY, N. V.

"Drying a Hydrogenerator by Losses in the Rotor," Elek. Stan., No. 10, 1949. Engr.

ZATRAVKIN, S.

Best suggestions on minor mechanization. Avt.transp. 40 no.2: 54-55 F '62. (MIRA 15:2)

(Transportation, Automotive)

ZATRAVKIN, S., inzh.

New regulations on inventions and efficiency suggestions.
Avt. transp. 37 no.7:57 Jl '59. (MIRA 12:10)
(Suggestion systems)

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Self-unloading truck with belt conveyor. Muk.-elev.prom. 20 no.7: 29-30 Jl '54. (MLRA 7:8)

1. Soyuzsagotrans.
(Motor trucks)

ZATRAVKIN, S.M.

Enterprises with best results in inventing and efficiency promotion. Avt.transp. 37 no.4:54 Ap '59. (MIRA 12:6)
(Efficiency, Industrial) (Inventions)

ZATRAVKIN, V. A., GOSTEVA, V. V.

Peat Industry

Initiative of the Shatura locomotive engineers. Torf. prom. 29 No. 9, 1952

Monthly List of Russian Accessions, Library of Congress. December 1952. Unclassified.

ZATRAVKIN, V. A., GOSTEVA, V. V.

Locomotives

Initiative of the Shatura locomotive engineers. Torf. Prom. 29 No. 9, 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

ZATREANU, G.

Contributions to the study of the incipient detonation in motor with spark ignition for automobile trucks.

p. 57 (Academia Republicii Populare Romine. Institutul de Energetica. Studii Si Cenetari De Energetica. Vol. 7, no. 1, 1957. Bucuresti, Rumania)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

SOUSKOVA,M.; ZATREPALEK,J.; VOTAVA,Z.

Automatic apparatus for studying defense conditioned reflexes in rats. Cesk. fysiol. 13 no.1:67-72 Ja'64.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.

CZECHOSLOVAKIA/Human and Animal Physiology - (Normal and Pathological). Blood Circulation. Heart. T

Abs Jour : Ref Zhur Biol., No 4, 1959, 17451

Author : Zatrepalek, J.
Inst : -
Title : An Apparatus for Measuring and Registration of Pulse Frequency in All Species of Laboratory Animals.

Orig Pub : Ceskosl. fysiol., 1957, 6, No 4, 536-540

Abstract : No abstract.

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CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological) Respiration.

Abs Jour : Ref Zhur Biol., No 6, 1959, 26639

Author : Zatrepalek, J.

Inst :

Title : Registration of Respiration With a Thermoelement, Thermister and Tensometer of Resistance.

Orig Pub : Cechosl. fysiol., 1958, 7, No 2, 117-121

Abstract : No abstract.

Card 1/1

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SCIENCE

ZATREPALEK, J. An instrument for measuring and registering the pulse frequencies of all kinds of laboratory animals. p. 536.

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ZATREPALEK, J.

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p. 211 (Sdelovaci Technika, Vol. 6, No. 6, June 1958, Praha, Czechoslovakia)

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KABELKA, M.; ZATREPALEK, C.J.

Fibrillation and electrical resuscitation of the heart; simple electrical defibrillator and stimulator. Cesk. pediat. 11 no.12: 900-905 Dec 56.

1. Klinika Pediatricke Chirurgie K.U. v Praze, prednosta doc. Dr. V. Kafka.
(CARDIOLOGY, appar. & instruments
electrical defibrillator & stimulator (Cz))

ZATREPALEK, J. ; JANEBA, K.

"A few practical experiences." p. 255.

-mh-. "Artificial satellites and television." p. 256.

SDELOVACI TECHNIKA. (MINISTERSTVO STROJIRENSTVI). Praha, Czechoslovakia, Vol. 7, no. 7, July, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959. Uncl.

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Apparatus for the measurement of pulse frequency in all large laboratory animals. Cesk. fysiol. 6 no.4:536-540 Nov 57.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.
(PULSE,
registration in large laboratory animals (Cz))

ZATREPALEK

Registration of respiration with a thermal unit, negative temperature coefficient or strain gauge. Cesk. fysiol. 7 no.2:117-121 Mar 58.

1. Vyzkumni ustav pro farmacii a biochemii, Praha.
(RESPIRATION, function tests,
registration with thermal unit, negative temperature coeficient & strain gauge (Cz))

ASLANOVA, G.D.; ZATRUTINA, R.F.; RUBINA, L.S.; SOKOLOVA, V.A.; SILKIN, B.I., otv. red.; BEREZOVA, A.S., red.

[Bibliography of the literature in Russian published in 1961] Bibliograficheskii ukazatel' literatury na russkom iazyke za 1961 g. Moskva, Izd-vo AN SSSR 1963. 146 p. (MIRA 17:4)

1. Akademiya nauk SSSR. Mezhduvedomstvennyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda.

ZATRUTINA, R F

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75 p. (NASA Techinical Translation F-12)

Translated from the Orginial Russian.

ZATHUTINA, R.F., bibliograf; RUBINA, L.S., bibliograf; SILKIN, B.I., otv.red.; BEREZOVA, A.S., red.; GUS'KOVA, O.M., tekhn.red.

[Bibliographic index of literature in the Russian language for the year 1959] Bibliograficheskii ukazatel' literatury na russkom iazyke za 1959 g. Moskva, Izd-vo Akad.nauk SSSR, 1960. 85 p. (MIRA 14:1)

1. Akademiya nauk SSSR. Mezhduvedomstvennyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda.
(Bibliography--Geophysics)

ZATS, A. A.

Chemical Abst.
Vol 48 No. 5
Mar. 10, 1954
Electrochemistry

The electrolytic reduction of lepidine. I. The electrolytic reduction of lepidine in an acid medium. V. V. Levchenko and A. A. Zats (Moscow Inst. Stomatol. Med.). *J. Gen. Chem. U.S.S.R.* 22, 1301-2(1952)(Engl. translation). —See *C.A.* 47, 421i. H. L. H.

LEVCHENKO, V.V.; ZATS, A.A.

Electrolytic reduction of lepidine. II. Electrolytic reduction of lepidine in alkaline medium. Zhur. Obshchey Khim. 22, 2071-6 '52. (MLRA 5:12) (CA 47 no.18:9328 '53)

1. Moscow Med. Stomatol. Inst.

USSR/Chemistry - Heterocyclic Compounds Nov 52

"The Chemical Reduction of Lepidine," A. A. Zats and V. T. Levchenko, Moscow Med Stomatological Inst

"Zhur Obshch Khim" Vol 22, No 11, pp 2076-2078

Research showed that during the chem reduction of lepidine in an acid medium, in addition to tetrahydro lepidine a new crystalline product was formed which does not form during the reduction of lepidine by other methods. It was demonstrated that this new product represents a hitherto unknown isomer of the dimer of dihydro lepidine, different from the dimer of dihydro lepidine obtained during the electrolytic

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ZATS, A. A. AND LEVCHENKO, V. V.

reduction of lepidine in an acidic or alk medium. It was established that there is no difference in principle between the chem reduction of lepidine with an amalgam of potassium or sodium, and the electrolytic reduction of lepidine in an alk medium at a mercury cathode.

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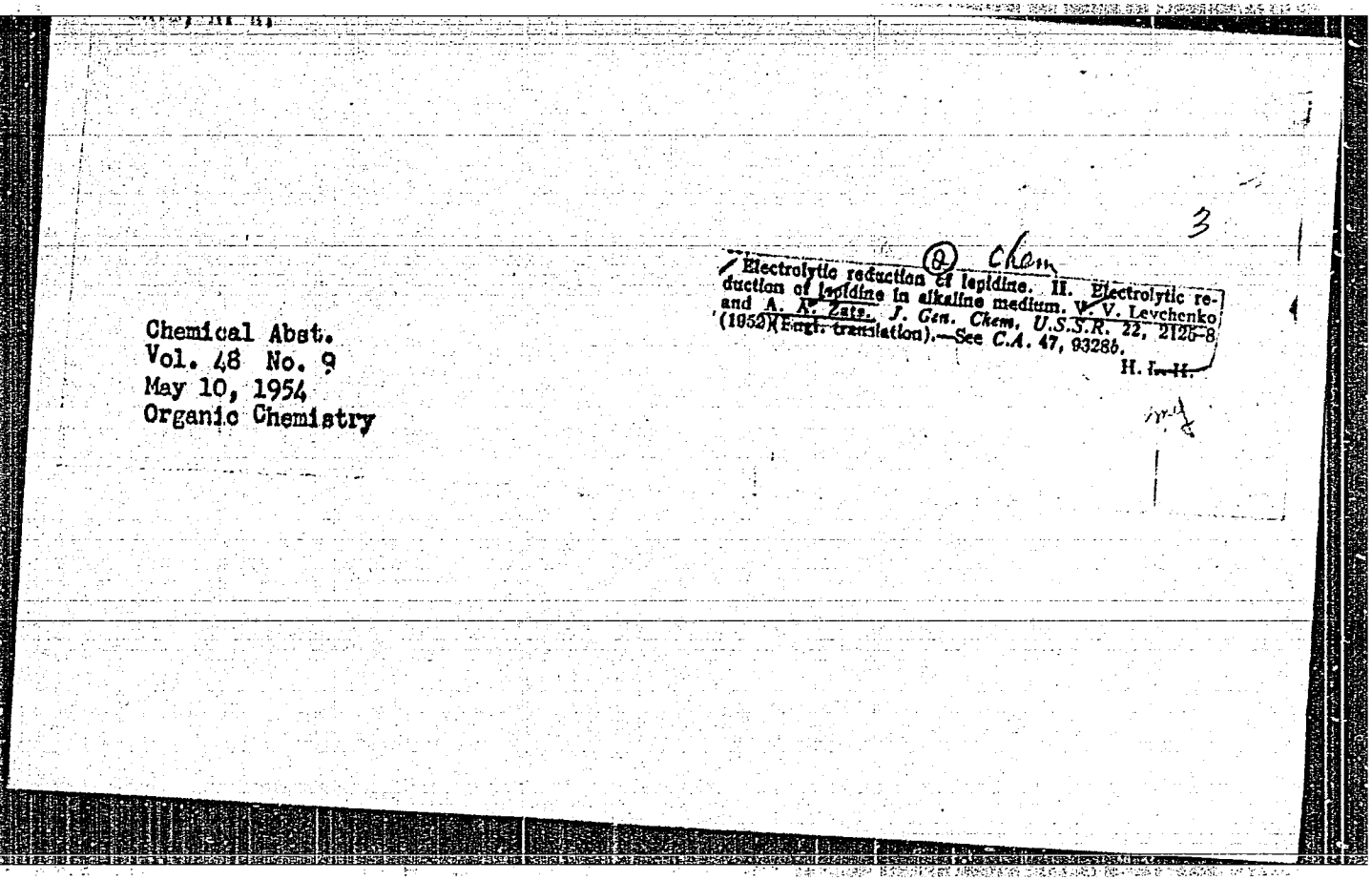

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Vol. 48 No. 9
May 10, 1954
Organic Chemistry

3

Ⓠ Chem.

Electrolytic reduction of lepidine. II. Electrolytic reduction of lepidine in alkaline medium. V. V. Levchenko and A. A. Zats. *J. Gen. Chem. U.S.S.R.* 22, 2125-8 (1952) (Engl. translation).—See *C.A.* 47, 9328b.

H. I. H.

ZATS, A. A.

Dissertation: "Electrolytic Reduction of Lepidine." Cand Chem Sci, Moscow Order of Lenin Chemicotechnological Inst imeni D. I. Mendeleyev, 4 May 54. Vecherryaya Moskva, Moscow, 26 May 54.

SO: SUM 284, 26 Nov 1954

ZATS, A.

N. DOGA, Spirto-Vodochnaya Prom. 17, n. 10/11, 21-5, 1940

ACC NR: AP6019560 (A) SOURCE CODE: UR/0416/66/000/001/0081/0082

AUTHOR: Zats, E. (Engineer; Lt. Col.)

ORG: none

TITLE: Electronic thermometer

SOURCE: Tyl i snabzh sov vooruzh sil, no. 1, 1966, 81-82

TOPIC TAGS: electronic circuit, thermometer, thermistor

ABSTRACT: For the remote-control measurement of products having toxic properties an electronic thermometer was developed which utilizes a thermistor with a resistance of 36 kohm at +20C as a sensing element. To avoid the shunting effect of the medium in which the temperature is measured, the ends of the thermistor are covered with several layers of vinylite tape or other material and the lead of the thermistor is covered with polyvinyl chloride insulation. A bridge of resistors and the thermistor are balanced at +20C. In this case the microammeter does not show a current. If the temperature of the sensing element changes, the balance of the bridge is upset since the resistance of the thermistor is changed and the microammeter shows a current proportional to the change of temperature of the medium into which the thermistor is immersed. The microammeter was calibrated for readings from +20C (zero current) to -5C (current of 50μA). The 1-μA scale divisions correspond to 0.5C. The measurement range of this instrument is from +20C to -5C, its accuracy is ± 0.5C, and current con-

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L 07506-67
ACC NR: AP6019560

sumption is ~0.3mA. The resistance of the leads to the sensing element should be less than 15—20 ohm to ensure the given accuracy of the measurements. The voltage of the power source is 11 V. Orig. art. has: 1 figure.

SUB CODE: 09/13/ SUBM DATE: none

Card 2/2 /mlc

ZATS, L. B.

ZATS, L. B. "Temporary short-sightedness caused by the internal introduction of disulfane", Vracheb. delo, 1948, No. 12, paragraphs 1069-70.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

ZATS, L. B.

26662 Mestnaya penitsillingterapiya pri gnoynyu infektsiyakh glaznogo yabloka. Oftalmol furnal; 1949, No. 3, s. 117-21

SO: LETOPIS' NO. 35, 1949

ZATS L. B.

PA 151T59

USSR/Medicine - Ophtholmosurgery Sep/Oct 49
Eyes, Injury to

"Prognostic Significance of Some Light Projections in Ophthalmosurgery," L. B. Zats, Eye Clinic, Stalino Med Inst, 2 pp

"Vest Oftalmol" Vol XXVIII, No 5

Contrary to general opinion, data from seven cases of wounds and contusions causing blindness or cataract proved that defective light projection is not always an unfavorable indication for surgical intervention. Two cases of blindness from wounds supported the opposite assumption that normal light projection is not always a favorable prognosis. Tests described may be insufficient. They require further study. Dir, Eye Clinic: Prof I. F. Kopp. Dir, Stalino Med Inst: Docent L. N. Kuz'menko.

151T59

USSR/Medicine - Ophtholmosurgery Sep/Oct 49
(Cont'd)

151T59

ZATS, L. B.

ZATS, L. B.: "Explosion injuries to the eyes of mine workers." Second Moscow State Medical Inst imeni I. V. Stalin. Stalino, 1956. (DISSERTATION FOR THE DEGREE OF DOCTOR IN MEDICAL SCIENCES).

Knizhnaya letopis',
No. 25, 1956. Moscow.

ZATS, L.B., kandidat meditsinskikh nauk

Bactericidal properties of coal which causes eye injuries in blast accidents in miners. Oft.zhur. 11 no.1:4-8 '56. (MLRA 9:9)

1. Iz kafedry glaznykh bolezney (zav.-prof. I.F.Kopp) i kafedry mikrobiologii (zav.-dotsent L.F.Kolomeytsev) Stalinskogo meditsinskogo instituta.

(EYE--WOUNDS AND INJURIES) (COAL)
(COAL MINES AND MINING--ACCIDENTS)

KOPP, I.F., professor,; ZATS, L.B., assistent.

Treatment of glaucoma in dispensaries in cities and districts of Stalino Province. Vest. oft. 69 no.1:8-16 Ja-F '56. (MIRA 9:5)

1. Iz kafedry glaznykh bolezney Stalinskogo meditsinskogo instituta.

(GLAUCOMA, ther.
management in dispensaries in Russia)

ZATS, L. B.

KOPP, I.F., professor; ZATS, L.B., kandidat meditsinskikh nauk

Indications for the choice of operative procedure in secondary glaucoma. Oft.zhur. 12 no.4:199-204 '57. (MIRA 10:11)

1. Iz kafedry glaznykh bolezney Stalinskogo meditsinskogo instituta
(EYE--SURGERY) (GLAUCOMA)

ZATS, L.B., doktor med.nauk; DRUZHININ, I.D., assistent; STRONGOVSKAYA, N.V., assistent; OZHIGAR, I.V., laborant

Evaluation of the reaction of the agglutination of virus-coated bacteria (AVB reaction) in the laboratory diagnosis of trachoma. Oft.zhur. 15 no.7:413-417 '60. (MIRA 13:11)

1. Iz kafedry glaznykh bolezney i kafedry mikrobiologii Stalinskogo meditsinskogo instituta imeni A.M.Gor'kogo.
(AGGLUTINATION)
(CONJUNCTIVITIS, GRANULAR)

ZATS, L.B., prof. (Donetsk)

Effectiveness of prophylactic measures for industrial traumatism of the eyes. Oft. zhur. 18 no.3:166-174 '63. (MIRA 17:4)

ZATS, L.B., prof.

Experience in organizing active detection of glaucoma among the population of Donets Province. Vest. oft. 76 no.1:31-33 Ja-F'63. (MIRA 16:6)

1. Kafedra glaznykh bolezney Donetskogo meditsinskogo instituta.

(DONETS PROVINCE—GLAUCOMA)

ZATS, L.B., prof.; DUGEL'NYY, G.A., kand.med.nauk

Histochemical study of carbohydrate metabolism in the regeneration of corneal wounds using different methods of treatment. Oft.zhur. 17 no.7:432-437 '62. (MIRA 16:3)

1. Iz glaznoy kliniki Donetskogo meditsinskogo instituta.
(CORNEA--WOUNDS AND INJURIES) (CARBOHYDRATE METABOLISM)

ZATS, L.B., doktor meditsinskikh nauk

Career of Professor Issidor Filippovich Kopp; on his 60th birthday.
Oft.zhur. 13 no.5:302 '58 (MIRA 11:10)
(KOPP, ISSIDOR FILIPPOVICH, 1898)

ZATS, R. M.

42670. BIRGER, O. G. i ZATS, R. M. Sul'famidoustoychivyye Varianty Dizenteriynykh Mikrobov. Byulleten' Eksperim. Biologii i Meditsiny. 1948, No 12, s. 444-46

SO; Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

ZATS, V.I.

Exhibition of new oceanographic instruments. Priroda 54 no.3:113-114 Mr '65. (MIRA 18:4)

1. Institut biologii yuzhnykh morey im. A.O. Kovalevskogo AN UkrSSR, Sevastopol'.

ZATS, V.I.

Characteristics of the regime of waves in the Yalta region. Sbor. rab. GMO CHAM no.1:77-103 '62. (MIRA 17:5)

ZATS, V.I. (Yalta)

Storm waves off the southern coast of the Crimea. Priroda 51 no.12:88-90 D '62. (MIRA 15:12)

(Black Sea—Waves)

ZATS, V.I.

Some characteristics of the roses of the sea wave energy on the southern coast of the Crimea. Okeanologiia 3 no.4:626-632 '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova, kafedra okeanologii.

KOVALENKO, V.S., inzh.; ZATS, Ye.I., inzh.

Corrosion resistance of low-carbon zirconium steels in acid and basic media. Mashinostroenie no.6:54-55 N-D '64 (MIRA 18:2)

BRAUN, M.P.; KOVALENKO, V.S.; ZATS, Ye.L.

Effect of zirconium on kinetics of carbide coalescence in prolonged isothermal heating of carbon steel. Izv. vyss. uchebn. zav.; chern. met. 7 no.12:122 '64 (MIRA 18:1)

1. Institut liteynogo proizvodstva AN USSR i Donetskiy nauchno-issledovatel'skiy institut chernoy metallurgii.

ACCESSION NR: AP4030666 S/0129/64/000/004/0030/0031

AUTHOR: Kovalenko, V. S.; Zato, Ye. L.

TITLE: Effect of zirconium on the corrosion resistance of steel.

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 4, 1964, 30-31

TOPIC TAGS: corrosion resistance, carbon steel, zirconium, zirconium containing steel, anodic passivation, corrosion, microcathode formation

ABSTRACT: The corrosion resistance in water of carbon steels containing 0.16-0.22% C and 0.03-0.05, 0.07-0.16 and 0.20-0.42% zirconium was examined. Up to 0.05% Zr had essentially no effect, but increasing the Zr content from 0.05 to 0.12% greatly reduced the corrosion. The corrosion rate remained constant with additions of Zr in excess of 0.12%. The absolute value for the corrosion resistance of 0.42% Zr-containing steel was about two times that of the 0.03-0.7% Zr-containing steels; the weight loss was stabilized faster, i.e., the anodic passivation was more rapid in the steel containing higher amount of Zr. The effect of Zr on the cathodic process was expressed in the formation of a greater number of microcathodes which did not affect the corrosion rate. Orig. art. has: 2 figures.

Card 1/2

ACCESSION NR: AP4030666

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00

SUB CODE: MM NO REF SOV: 000 OTHER: 001

Card 2/2

OZHIGOV, Ye.P.; ZATSARIN, A.I.

Volatility and pyrohydrolysis of lithium fluoride. Soob. DVFAN SSSR no. 15:31-36 '62. (MIRA 17:9)

1. Dal'nevostochnyy filial imeni Komarova Sibirskogo otdeleniya AN SSSR.

ZATSARIN, A.I.; OZHIGOV, Ye.P.

Studying the volatility of potassium fluoride. Soob.DVFAN SSSR no.12:43-47 '60. (MIRA 13:11)

1. Dal'nevostochnyy filial imeni V.L.Komarova Sibirskogo otdeleniya AN SSSR.

(Potassium fluoride)

S/767/61/000/005/002/003
I001/I242

AUTHORS: Ozhigov, Ye.P. and Zatsarin, A.I.

TITLE: The volatility of beryllium fluoride. Behavior of Beryllium fluoride heated in a current of nitrogen, oxygen, water-vapor and air. Communication I

SOURCE: Akademiya nauk SSSR. Dal'nevostochnyy filial. Trudy. Seriya khimicheskaya. no.5. Moscow, 1961. Sbornik rabot po obshchey khimii i kompleksnomu izucheniyu khimicheskogo syr'ya Dal'nego Vostoka. 24-34

TEXT: The object of this work was a gravimetric investigation of the velocity of evaporation of beryllium fluoride at different temperatures by continuous determination of weight losses of the salt. After sublimation of beryllium oxyfluoride small blisters were discovered in the platinum crucible, and the platinum wire became brittle. Thus a more electronegative element (F) was displaced by a lesser one (O). Evaporation of beryllium fluoride heated in a current of nitrogen occurs at about 900°C. Maximum losses in weight

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I001/I242

The volatility of beryllium...

take place at 1100-1200°C, in agreement with the theoretical boiling point of 1159°C for beryllium fluoride. Beryllium fluoride heated in oxygen is apparently oxidized to $5BeF_2.2BeO$. Beryllium fluoride heated in water vapor hydrolyzes completely, with the formation of beryllium oxide and hydrogen fluoride. Pyrohydrolysis starts at 420°C, with maximum rate at 800-1000°C. Beryllium fluoride heated in air can be hydrolyzed, as well as vaporized. The extent of these reactions depends on the temperature and humidity of air. There are 6 figures and 6 tables.

Card 2/2

ZATSARINNYY, N., podpolkovnik

Shooting in an inhabited locality. Voen. vest. 43 no.9:104-106 S '63. (MIRA 16:10)

(Shooting, Military)

OZHIGOV, Ye.P.; ZATSARIN, A.I.

Behavior of silver fluoride when heated in a current of nitrogens and water vapors. Soob. IVFAN SSSR no.18:47-52 '63. (MIRA 17:11)

1. Dal'nevostochnyy filial imeni Komarova Sibirskogo otdeleniya AN SSSR.

ZATSARINNYY, V.V., Cand Vet Sci--(diss) "Effect of cotton husk on the gastric secretory function, state of health, and work capacity of horses." Alma-Ata, 1958. 16 pp (Min of Agr USSR. Alma-Ata ZooVet Inst), 100 copies (KL,26-58,114)

ZATSARINNYY, V.V., vet.vrach

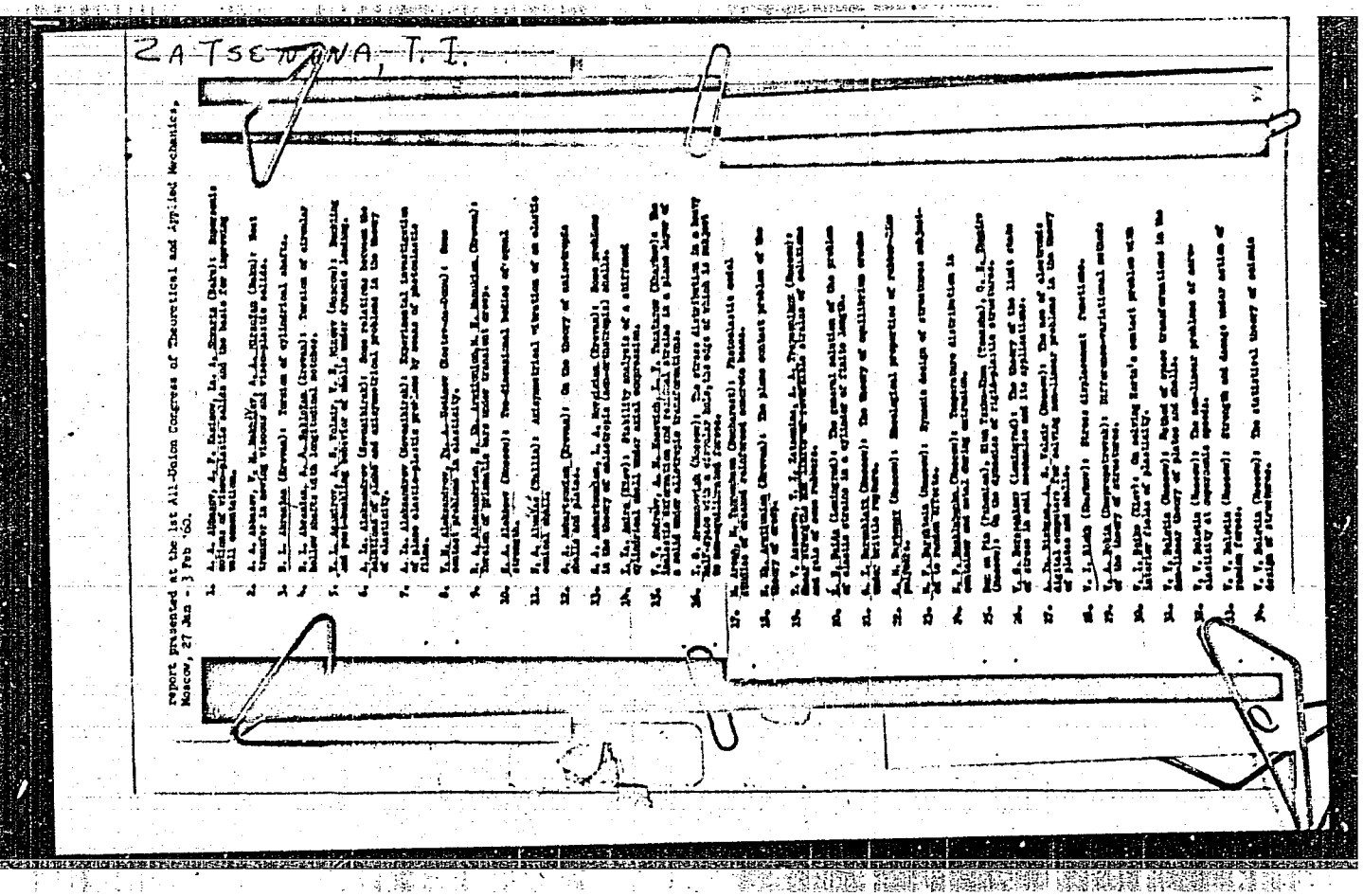
Effect of cotton husks on the secretory function of the stomach, the health and working capacity of horses. Trudy AZVI 10:252-273 '57. (MIRA 12:8)

1. Iz kafedry chastnoy patologii i terapii (zav.kafedroy - chlen-korrespondent AN KazSSR, zasluzhennyy deyatel' nauki KazSSR, doktor prof. Ya.I.Kleynbok) Alma-Atinskogo zoovet-instituta.
(Horses--Physiology) (Cotton seed products as feeding stuff)

ZATSENINA, N.D.; MIZINA, A.V.; VOINOVA, T.I. (Cand. of Med. Sci.)

"Therapeutic Action of Terramycin in Cases of Trachoma,"

p. 385 Ministry of Health USSR Proceedings of the Second All-Union Conference on Antibiotics, 31 May - 9 June 1957. p. 405, Moscow, Medgiz, 1957.



ZATSEPINA, T. I.

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 60.

ZATSEPA, A.A.

Sectional cup-shaped cutting tools. Stan.i instr. 29 no.12:37 D '58. (MIRA 11:12)

(Metal-cutting tools)

ZATSEPA, A.A.

Holder for planer tools. Stan. i instr. 26 no. 10:35 O'55. (MIRA 9:1)

(Planing machines) (Cutting tools)

ZATSEPA, A.A.

Chucks for the mechanical fastening of powdered metal tipped tools.
Stan, i instr. 25 no.9:32 S '54. (MLRA 7:11)
(Chucks)

ZATSEPA, A. A.

Device for straightening grinding wheels on two-way grinders. Stan. i instr. 33 no.10:41 O '62. (MIRA 15:10)

(Grinding wheels)

Zatsepa, A. A.

Card :

Author : Zatsepa, A. A.

Title :

Periodical :

Abstract :

Publication :

Submitted :

SOV/96-60-2-3/24

AUTHORS: Deych, M. Ye., Doctor of Technical Sciences, Zaryankin, A. Ye., Candidate of Technical Sciences, Filippov, G.A., and Zatsepin, M. F., Engineers

TITLE: Methods of Increasing the Efficiency of Turbine Stages with Short Blades

PERIODICAL: Teploenergetika, 1960, Nr 2, pp 18-24 (USSR)

ABSTRACT: The efficiency of the high-pressure parts of large turbines having fixed and runner blades of improved profiles and provided with good internal glands and seals reaches 78 to 80%. Further improvements in profiling are not likely to give much better efficiency, as modern blades already have very low profile-losses. However, the efficiency of intermediate high-pressure stages can be appreciably increased by special profiling of the fixed blades in the meridional plane and by using runner blades with diffuser channels. Meridianal profiling is now being developed to give stages of constant reaction. In high-pressure stages this problem is best solved by trying to reduce the end losses. In order to reduce the end losses in fixed blades, it is necessary to reduce the velocity on sections of maximum

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channel curvature where secondary flows are most marked. This ensures turbulent flow and so reduces the thickness of boundary layers on the backs of the blading and on the upper and lower walls of the channel. This is accomplished by profiling the channels along their height (profiling in the meridional plane). The profiling may be symmetrical with straight or curved faces, or asymmetrical with straight or curved generating lines. Asymmetrical profiling makes it possible both to reduce the end losses and to reduce the radial pressure gradient. The present article gives test results on blading with asymmetrical profiling over the height, both with the blades mounted in straight rows and on rotors. Fig 1 gives graphs of the loss distribution over the height of a straight row of blades with different shapes of the upper rim. It will be seen that the best results are obtained with asymmetrical profiling beyond the position where the curvature of the channel is greatest. The reduction in fixed-blade losses by the use of asymmetrical profiling is explained by reference to the

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graph of pressure distribution across the profile given in Fig 2. It is also pointed out that in the blading with asymmetrical profiling the point of minimum pressure is displaced somewhat in the direction of flow. Hence the length of the turbulent section and the pressure gradients in it are somewhat reduced. This has the effect of reducing the profile losses. The loss-coefficient curves plotted in Fig 3 clearly show the advantages of blades with asymmetrical profiling over the height, particularly for short blading. The effect of this special profiling is greater when the blades are mounted on a rotor because the losses at the blade roots are particularly reduced, thereby helping to equalise the velocity distribution. The best shape of profiling is then considered. Graphs of loss reduction as a function of profiling compression, plotted in Fig 4, indicate that the optimum amount of compression depends on the blade length. The shape of the compression curve may be based on calculation of the flow potential in the channel. A diagram of a profiled channel with three

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different degrees of compression is given in Fig 5, and calculated and experimental velocity distributions over a straight arrangement of blading caps TS-2A is given in Fig 6. It will be seen that agreement between theory and experiment is good. Tests on intermediate-stage fixed blades with diffuser inlets showed that under static conditions their use does not influence the effect of asymmetrical profiling over the height. Test results are plotted in Fig 7 and it is considered that the use of fixed blades with a complicated shape of outer rim increases the efficiency of intermediate stages with short blades. Further information about the use of fixed blades with asymmetrical profiling was obtained by testing groups of stages in the experimental steam turbine of the Moscow Power Institute. All stages have the same mean diameter of 400 mm; the other dimensions are tabulated. Tests were made on six stages of various blade lengths. Some were made with fixed blades profiled over the height and some with unprofiled blades. All the diaphragms were welded.

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The tests covered a fairly wide range of velocity ratio and heat drop. The results, plotted in Fig 8, indicate that at optimum velocity ratio the stage with profiled blades has 2% higher efficiency with a blade length of 25 mm, and 3% higher with a length of 15 mm. The relative increase in efficiency by the use of asymmetrical profiling is 2.5% and 3.7 to 4% respectively. Asymmetrically-profiled blades continue to offer advantages when operation is not at the designed conditions, as is explained by reference to other curves on Fig 8. Important results were obtained on measuring the reaction in the blade root and tip sections. The use of asymmetrical profiling reduces the variations in static pressure distribution over the pitch in the sections. As will be seen from the graphs plotted in Fig 9 there was also a marked reduction in the difference between the reactions at the root and tip. The value of the outlet area of the guide vanes may be calculated from formula (1). An approximate method is given for calculating the asymmetrical profiling, using

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Eq (2). It is concluded that asymmetrical profiling of the fixed blades across the height helps to give stages with constant reaction over the radius. In stages with very short blading any profiling of the channels over the height undertaken to reduce the difference in reaction should also be designed to reduce the end losses. The method of asymmetrical profiling that is proposed in this article solves these two problems. There are 9 figures, 1 table and 4 Soviet references.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute)

ZATSEPA, N., polkovnik, zasluzhennyy shturman-ispytatel' SSSR

Piloting airplanes at supersonic speeds. Av.i kosm. 44 no.2:52-54 '62. (MIRA 15:3)

(Airplanes—Piloting)

ZATSEPIN, N. N.

Ferromagnetic probe detection of fine surface cracks in steel rods and pipes. Zav. lab. 28 no.12:1465-1466 '62. (MIRA 16:1)

(Steel bars) (Pipe, Steel)

AID P - 4748

Subject : USSR/Aeronautics - bombing

Card 1/1 Pub. 135 - 6/31

Author : Zatsepa, N. S., Lt. Col., Navigator Class I

Title : Bombing targets under poor visibility conditions

Periodical : Vest. vozd. flota, 8, 24-28, Ag 1956

Abstract : The author describes by several specific examples the procedure of target finding and bombing by the combined use of radar and optical bombsight. Four diagrams. The article merits attention.

Institution : None

Submitted : No date

AID P - 5329

Subject : USSR/Aeronautics - air navigation

Card 1/1 Pub. 135 - 8/24

Author : Zatsepa, N. S., Lt. Col., mil. navigator class I

Title : The use of air position indicator in flight

Periodical : Vest. vozd. flota, 12, 38-45, D 1956

Abstract : The use of the air position indicator in air navigation, bombing, and in determining the wind at flight altitude is discussed by the author. One photo, 5 diagrams, 2 tables. The article merits attention.

Institution : None

Submitted : No date

ZATSEPA, N.S., voyennyy shturman pervogo klassa, podpolkovnik.

Particular aspects of bombing at low altitudes. Vest. Vozd. Fl. 39 no.4:37-42 Ap '57. (MLRA 10:9)

(Bombing, Aerial)

ZATSEPA, N.S.

86-58-3-14/37

AUTHOR: Zatsepa, N.S. Col, Filippov, A.I., Maj, and Chuvikov, B.S., Capt

TITLE: Bombing from Low Altitudes (Bombometaniye s maloy vysoty)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 3, pp 35-41 (USSR)

ABSTRACT: The article deals with low-altitude bombing and consists of the following two parts: 1. "Approaching the Target" by N.S. Zatsepa and 2. "Release of Bombs" by A.I. Filippov and B.S. Chuvikov. In the first part the authors, on the basis of the experience gained during low-altitude bombing missions under various weather conditions, deal mostly with the special features of air navigation at low altitudes. The second part deals with low-altitude bombing. The authors state that before the crews are permitted to do actual low-altitude bombing, they must carry out some preliminary practice. First, the crews begin with low-altitude flights in the bombing-range area in order to become familiar with the relief and visibility of targets. According to the authors, the targets on their bombing

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range are built of vertical panels, 2.5 - 3 m high, in the form of fences. Second, the crews practice photo-bombing. When starting actual low-altitude bombing, the authors recommend that the crews should determine in time the necessary aiming data. This should be done at a distance not greater than 50 km from the target on a course parallel to the bomb-run course. The authors also mention briefly some special features in the operation of the optical bombsight at low altitudes.

AVAILABLE: Library of Congress

Card 2/2

SOV/86-58-9-17/42

AUTHOR: Zatsepa, N. S., Navigator First Class

TITLE: A Long-Distance Flight Under Complex Conditions (Dal'niy polet v slozhnykh usloviyakh)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 9, pp 30-36 (USSR)

ABSTRACT: Proceeding from the professional standpoint of a navigator, the author describes a long-distance flight of a "TU-114D" aircraft. The flight was made in July 1958. The aircraft covered a distance of 34,400 km in 48.5 flying hours. The first leg of the route was flown via the Arctic to the Far East; the second leg--over the Sea of Okhotsk to Lake Baikal; the third leg--over the deserts of Central Asia, the Central Asian Soviet Union Republics, and over the Arctic; the fourth leg--over the rest of the capitals of the Soviet Union Republics. The author also describes the preparations for the flight, the plotting of the flight route, and air navigation during the flight.

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ZATSEPA, N.S., polkovnik, zasluzhennyy shturman-ispytatel' SSSR.

Use of check points in making a landing. Vest.Vozd.Fl. no.8:60-65 Ag '60. (MIRA 13:9)
(Airplanes—Landing)

ANISIMOV, N.M.; AREF'YEV, V.A.; VINSHTEYN, E.S.; ZATSEPELIN, V.G.

Pneumatic mixing of raw mixes. TSement 26 no.5:19-22 S-O '60.
(MIRA 13:10)

(Krivoy Rog--Cement plants) (Mixing machinery)

PANASHCHENKO, I.P., dots.; CHUNTULOV, V.T., dots.; POGREBINSKIY, A.P., prof.; SPATAR, N.G., dots.; LAUTA, S.P., dots.; USTINOVA, L.A., dots.; KRIVEN', P.V., prof.; FILIPPOV, V.I., dots.; GOLUBEV,V.A., kand. ekon. nauk; DZYUBKO, I.S., dots.; GRIGOR'YEV,A.N., dots.; ZATSEPILIN, V.G., dots.; TERESHCHENKO, V.F.; LOYBERG, M.Ya., kand. ist. nauk ; ORLIK, Ye.L., red.; KHOKHANOVSKAYA, T.I., tekhn. red.

[Economic history of foreign countries]Ekonomicheskaia istoriia zarubezhnykh stran; kurs lektsii. Kiev, Izd-vo Kievskogo univ. Pt.2.[From the 1870's to the present time]Ot 70-kh godov XIX v. do nastoiashchego vremeni. 1961. 387 p. (MIRA 15:11)

1. Prepodavateli kafedr politicheskoy ekonomii i istorii narodnogo khozyaystva Kiyevskogo instituta narodnogo khozyaystva (for all except Orlik, Khokhanovskaya).

(Economic history)

SAVCHENKO, Sergey Grigor'yevich; ZATSEPILIN, V.G.[Zatsepilin, V.H.], kand. ekonom. nauk, dots., otv. red.; SKRYPNYK, V.T., [Skrypnyk, V.T.], red.; MATVIICHUK, O.A., tekhn. red.

[Man is the most important productive force of human society] Liudyna - holovna produktyvna syla suspil'stva. Kyiv, Tovarystvo dlia poshyrennia polit. i naukovykh znan' URSR, 1962. 43 p. (MIRA 15:11)

(Economics) (Work)

ZATSEPIN, A. I.

The TSShVP-180/6 explosion-proof transformer substation. Biul. tekh.-ekon.inform. no.8:34-36 '60. (MIRA 13:9)
(Electric transformers)

ZATSEPIN, A.I., inzh.; GERASIMOVA, L.S., inzh.

The OTsR-2800/25 power transformers. Energ. i elektrotekh. prom. no.1: 19 Ja-Mr '65. (MIRA 18:5)

ZATSEPIN, A.I.

The KPM1201-36A2T complete converter unit. Biul. tekh.-ekon. inform. no. 2:42-43 '61. (MIRA 14:2)
(Electric current converters)

ZATSEPIN, A.I.

Improved tumbling drum. Mashinostroitel' no.6:21 Je '61. (MIRA 14:6)

(Metals—Finishing)

ZATSEPIN, A.I.

Modernizing electric-crane couplings. Mashinostroitel' no.3:16 Mr '61. (MIRA 14:3)

(Couplings--Technological innovations)